BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents *will not* correct images, please do not report the images to the Image Problem Mailbox.

this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to our Deposit Account No. 19-0036.

Amendments

In the Claims:

Please cancel claims 29, 47, 67 without prejudice or disclaimer.

Please substitute the following claim

28. (once amended) A method for identifying a compound that inhibits the ubiquitination reaction mediated by the Anaphase Promoting Complex (APC), comprising

(a) reacting APC11, ubiquitin, a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ATP, and a test compound under conditions and duration of time sufficient to obtain a measurable level of multiubiquitin chains in the absence of said test compound; and

(b) comparing the level of multiubiquitin chains formed in the presence of said test compound to the level of multiubiquitin chains formed in the absence of said test compound;

wherein said reaction is made in the absence of APC subunits other than APC11.

30. (once amended) The method of claim 28, wherein said APC11 is human.

31. (once amended) The method of claim 28, wherein said E1 is wheat UBA1.

32. (once amended) The method of claim 28, wherein said E2 is the human variant UBCH5b.

33. (once amended) The method of claim 28, wherein the formation of multiubiquitin chains is measured using an antibody.

38. (once amended) The method of claim 28, wherein said formation of multiubiquitin chains is measured using fluorescence resonance energy transfer (FRET).

39. (once amended) The method of claim 28, wherein one or more assay component selected from the group consisting of APC11, E1, E2 and ubiquitin is fused to an affinity tag.

46. (once amended) A method for identifying a compound that inhibits the ubiquitination reaction mediated by the Anaphase Promoting Complex (APC), comprising

(a) reacting APC11, ubiquitin, an APC substrate, a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ATP, and a test compound under conditions and duration of time sufficient to obtain a measurable level of multiubiquitin chains on said substrate in the absence of said test compound; and

(b) comparing the level of multiubiquitin chains formed in the presence of said test compound to the level of multiubiquitin chains formed in the absence of said test compound;

wherein said reaction is made in the absence of APC subunits other than APC11.

48. (once amended) The method of claim 46, wherein said APC11 is human.

49. (once amended) The method of claim 46, wherein said APC substrate is CyclinB.

50. (once amended) The method of claim 46, wherein said APC substrate is Securin.

51. (once amended) The method of claim 46, wherein said E1 is wheat UBA1.

52. (once amended) The method of claim 46, wherein said E2 is the human variant UBCH5b.

53. (once amended) The method of claim 46, wherein the formation of multiubiquitin chains is measured using an antibody.

58. (once amended) The method of claim 46, wherein said formation of multiubiquitin chains is measured using fluorescence resonance energy transfer (FRET).

59. (once amended) The method of claim 46, wherein one or more assay component selected from the group consisting of APC11, E1, E2 and ubiquitin is a fused to an affinity tag.

66. (once amended) A method for identifying a compound that inhibits the self-ubiquitination reaction mediated by the Anaphase Promoting Complex (APC), comprising

(a) reacting APC11, ubiquitin, a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ATP, and a test compound under conditions and duration of time sufficient to obtain a measurable level of ubiquitination of APC11 in the absence of said test compound; and

(b) comparing the level of ubiquitination of APC11 in the presence of said test compound to the level of ubiquitination of APC11 in the absence of said test compound.

68. (once amended) The method of claim 66, wherein said APC11 is human.

69. (once amended) The method of claim 66, wherein said E1 is wheat UBA1.

70. (once amended) The method of claim 66, wherein said E2 is the human variant UBCH5b.

71. (once amended) The method of claim 66, wherein said ubiquitination of APC11 is measured using an antibody.

76. (once amended) The method of claim 66, wherein said formation of multiubiquitin chains is measured using fluorescence resonance energy transfer (FRET).

77. (once amended) The method of claim 66, wherein one or more assay component selected from the group consisting of APC11, E1, E2 and ubiquitin is a fused to an affinity tag.